## United States Department of State

Washington, D.C. 20520

July 9, 2001

Ms. Janice Dunn Lee Director, International Programs United States Nuclear Regulatory Commission Rockville, Maryland Docket # 11005266

Dear Ms. Lee:

I refer to the letter from your office dated May 11, 2001, requesting the views of the Executive Branch as to whether issuance of an export license in accordance with the application hereinafter described meets the applicable criteria of the Atomic Energy Act of 1954, as amended:

NRC No. XMAT0401 -- Sigma-Aldrich Corp. has applied for authorization to export to Japan 2,500 kilograms of heavy water, deuterium gas and deuterium compounds over a three year period for non-nuclear end-use. The materials will be exported to Sigma-Aldrich Japan and Nippon Sanso Corporation for distribution to the Japanese medical, pharmaceutical, chemical and industrial markets. Sigma-Aldrich customers in Japan typically use these materials in relatively small quantities (i.e., less than 1 kg) for scientific research. Most of the products will be sold to Japan in prepackaged units; however, some heavy water will be sold to Nippon Sanso in bulk form for further labeling of compounds for distribution throughout Japan.

It is the judgment of the Executive Branch that the proposed export will not be inimical to the common defense and security of the United States, and is consistent with the provisions of the Atomic Energy Act of 1954, as amended by the Nuclear Non-Proliferation Act of 1978.

As a party to the NPT, Japan has committed itself to maintain IAEA safeguards on all of its peaceful nuclear activities and has pledged not to produce or otherwise acquire any nuclear explosive device, therefore satisfying criteria (1) and (2) of Section 109b of the Atomic Energy Act, as amended, for exports of nuclear components, substances and items. The remaining criterion, agreement not to retransfer any of the U.S.-supplied heavy water or deuterium gas without prior U.S. consent, has been satisfied by the receipt of generic assurance letters dated October 5, 1978 and February 28, 1979 from the Embassy of Japan, the subject of previous correspondence on exports of nuclear moderator material to Japan.

On the basis of the foregoing, the Executive Branch recommends that the license be issued.

Sincerely,

Richard J.K. Stratford

Director

Nuclear Energy Affairs

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